



USAID | **LIBERIA**
FROM THE AMERICAN PEOPLE

FOOD AND ENTERPRISE DEVELOPMENT (FED) PROGRAM FOR LIBERIA

MONTHLY REPORT: MAY 2015



This publication was produced for review by the United States Agency for International Development.

It was prepared by Development Alternatives Incorporated.

Contractor: DAI
Program Title: Food and Enterprise Development Program for Liberia (FED)
Sponsoring USAID Office: USAID/Liberia
Contract Number: 669-00-11-00047-00
Date of Publication: June 15, 2015

Photo Caption: *Rugie Barry (in black) the proprietor of the Liberia Business Incubator (LBI) with her staff during the official inauguration of her new cassava processing facility in May 2015.*

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Acronyms

AEDE	Agency for Economic Development and Empowerment
APDRA	Association Pisciculture et Development Rural en Afrique
AVTP	Accelerated Vocational Training Program
AYP	Advancing Youth Project
BSTVSE	Bureau of Science, Technical, Vocational and Special Education
BWI	Booker Washington Institute
CARI	Center of Agriculture Research Institute
CAHW	Community Animal Health Worker
CBF	County Based Facilitator
CILSS	Permanent Interstates Committee for Drought Control in the Sahel
CoE	Center of Excellence
CYNP	Community Youth Network Program
DAI	Development Alternatives Inc.
DCOP	Deputy Chief of Party
ECOWAS	Economic Community of West African States
ECREP	Evangelical Children Rehabilitation Program
EMMP	Environmental Mitigation and Monitoring Plan
EO	Extension Officer
FtF	Feed the Future
FGD	Focus Group Discussion
FUN	Farmer Union Network
GAP	Good Agriculture Practices
GBCC	Grand Bassa Community College
GCAP	Green Coast Agricultural Program
GPS	Global Positioning Systems
IBEX	Investing in Business Expansion Liberia
IFDC	International Fertilizer Developmental Center
IITA	International Institute for Tropical Agriculture
IP	Implementing Partner
IQC	Indefinite Quantity Contract
ISFM	Integrated Soil Fertility Management
KRTTI	Kakata Rural Teachers Training Institute
LABEE IPG	Liberia Agriculture Business Enabling Environment Inter-Agency Policy Group
LAUNCH	Liberia Agriculture, Upgrading Nutrition & Child Health
LCCC	Lofa County Community College
LIFE	Livelihood Improvement for Farming Enterprises

LIPAS	Liberia Integrated Professional Agriculture Service
LMEP	Liberia Monitoring and Evaluation Program
LNGO	Local Non-Governmental Organization
MFI	Micro Finance Institution
MIS	Market Information Systems
MoA	Ministry of Agriculture
MoCI	Ministry of Commerce and Industry
MoE	Ministry of Education
MoHSW	Ministry of Health and Social Welfare
MoP	Muriate of Potash
MoU	Memorandum of Understanding
MSME	Micro, Small and Medium Enterprise
NDA	National Diploma in Agriculture
NCCC	Nimba County Community College
NIC	National Investment Commission
PERSUAP	Pesticide Evaluation Report and Safer Use Action Plan
PIDS	Performance Indicator Database System
PMP	Performance Management Plan
PUA	Peri-Urban Agriculture
R&RF	Rights & Rice Foundation
RFTOP	Requests for Task Order Proposals
RRA	Rapid Rural Appraisal
TAMIS	Technical Administrative Management Information System
TSP	Triple Super-Phosphate
TVET	Technical, Vocational Education and Training
UDP	Urea Deep Placement
UL	University of Liberia
USADF	United States African Development Foundation
USAID	United States Agency for International Development
VET GOV	Veterinary Governance in Africa
WAAPP	West Africa Agriculture Productivity Program
WAFP	West Africa Fertilizer Project
WASP	West Africa Seed Project
WFP	World Food Program

Table of Contents

Acronyms	3
Table of Contents	5
List of Tables and Figures	6
Background	7
Executive Summary	8
Component One: Increase Agricultural Productivity and Profitability	9
Task 1A: Increased Productivity and Profitability of the Rice Value Chain.....	9
Task 1B: Increased Productivity and Profitability of the Cassava Value Chain.....	12
Task 1C: Increased Productivity and Profitability of the Horticulture Value Chain	13
Task 1D: Increased Productivity and Profitability of the Goat Value Chain	15
Sub Task 1.1 Special Studies and MoA Data Collection System Development.....	19
Sub Task 1.2 Improved access to Agricultural Inputs.....	20
Sub Task 1.3 Agricultural Extension Support.....	21
Sub Task 1.4 Youth in Agribusiness.....	23
Sub Task 1.5: Improving Human Nutrition.....	24
Component Two: Stimulate Private Sector Growth and Investment	25
Task 2: Policy Enabling Environment for Private Sector Growth	25
Subtask 2.1: Access to Financing.....	27
Subtask 2.2: Access to Business Development Support (BDS) Services and Enterprise Service Centers	27
Subtask 2.3: Women Participation in Agribusiness	28
Component Three: Build Local Technical and Managerial Human Resource Capability	30
Component Four: Cross-Cutting Activities	34
Task 4.1: Communications/Knowledge Management.....	34
Task 4.2: Environmental Compliance.....	34
Task 4.3: Monitoring & Evaluation	35

List of Tables and Figures

Tables

Table 1: FY14 Rice crop sales.....	9
Table 2: Fertilizer distribution by County.....	10
Table 3: Selected rice business hubs sites.....	11
Table 4: Improved varieties shortlisted for release.....	12
Table 5: Distribution of crates by county.....	14
Table 6: Distribution plan for packaging crates for trader associations.....	14
Table 7: Rain shelters installed in FY15 sites.....	15
Table 8: Number of shelters constructed in FY15 goat production intensification sites.....	17
Table 9: BSP's TOT with Village/Group Agents Workshop Breakdown.....	28
Table 10: Breakdown of received draft Business Plan Templates.....	28
Table 11: Agricultural Department & NDA student enrollment.....	30
Table 12: Institution enrollment data reflecting total number of students per institution excluding the Agriculture Department.....	30
Table 13: LCCC NDA instructors.....	30
Table 14: GBCC NDA instructors.....	31
Table 15: NCCC NDA instructors.....	31
Table 16: BWI NDA instructors.....	31

Figures

Figure 1: Lowland clearing and field layout in Mamai Town, Voinjama District.....	9
Figure 2: The Speaker of the House, Hon. Alex Tyler and the US Ambassador Deborah Malac cutting the ribbon at LBI's facility.....	13
Figure 3: Ms. Ruggie Barry, CEO of LBI guiding the guests in the processing facility during the launch.....	13
Figure 4: USAID FED's Senior Horticulture Specialist assisting farmers to lay plots for Okra production at Bernard Curve, Todee district.....	14
Figure 5: Rain shelter installed at Home of Destiny cluster in Brewerville, Montserrado County.....	15
Figure 6: Construction of Zero Energy Cooler at Kakata, Margibi County.....	15
Figure 7: Community Animal Health Worker Nancy Morris treats a goat in Leobengu, Lofa County.....	16
Figure 8: Neorpeh site water wells nearing completion, Grand Bassa.....	17
Figure 9: PPR Vaccine vials at the National Drug Service cold storage facility in Monrovia.....	17
Figure 10: Trader IC, Jeff Samah, trains farmers on selection of animals for market in Vanyan, Bong County.....	18
Figure 11: Traders and goat farmers at the marketing event in Melekie, Bong County.....	18
Figure 12: Farmers being coached on feeding strategies in Bong County.....	19
Figure 13: USAID FED irrigation Specialist receiving Foundation seed from CARI Staff in Suakoko, Bong County.....	20
Figure 14: Farmer showing plant with 38 tillers at Garmue2.....	21
Figure 15: Snapshots of rice extension materials that have been developed.....	22
Figure 16: See Yourself Agriculture youth group members preparing land for planting at Todee, Montserrado County.....	23
Figure 17: Okra ready for harvest at See Yourself Youth Group plot in Todee, Montserrado County.....	23
Figure 18: Youth group members at Todee, Montserrado receiving training on nursery management from extension aide.....	23
Figure 19: USAID FED's Goat Officer explaining the nutrition poster during the livestock chairmen training in Gbarnga, Bong County.....	24
Figure 20: Training of Trainer (ToT) workshop being delivered in Foya, Lofa County.....	27
Figure 21: Madame Joyce Korvah, owner, Joyce Kolvah Vegetable & Cassava Farm and Dr. Levi Zangai , GBCC President signing a MoU for the practical exercise program of the NDA.....	32
Figure 22: Cowpeas being planted at a NCCC demonstration farm.....	32
Figure 23: Power tiller training at NCCC campus.....	32
Figure 24: The NDA students at GBCC in Big Joe Town conducting their practical exercises at the farm.....	33
Figure 25: Payecea town lowland rice ditch being constructed.....	34

Background

The USAID Food and Enterprise Development (FED) Program is a flagship Feed the Future (FtF) Initiative, USAID-funded development program in Liberia that was launched in September 2011. USAID FED uses an all-inclusive strategy incorporating MSME farmers, processors, suppliers, women, and youth while partnering with the government of Liberia and local civil society to achieve food security.

The goal of USAID FED is to increase food availability, utilization, and accessibility by building an indigenous incentive structure that assists agricultural stakeholders in adopting commercial approaches.

This incentive structure is built upon:

- Improved technology for productivity and profitability
- Expanded and modernized input supply and extension systems
- Commercial production, marketing, and processing
- Enterprise services
- Workforce development

USAID FED works with the Ministry of Agriculture (MoA), civil society and the private sector in providing communities access to agricultural inputs, extension services, nutrition messages, processing services, market information, transportation, credit, agro-business education, training, and business development services.

In five years, USAID FED's thrust to expand market linkages is expected to lead to substantial increases in income and job opportunities. USAID FED aims to significantly boost the production, processing, marketing and nutritional utilization of rice, cassava and vegetables, and to enhance the productivity of goat farming in the counties covered by the program.

These initiatives are being carried out in Bong, Lofa, Nimba, Grand Bassa, Montserrado, and Margibi counties. USAID FED focuses on these counties because they are situated along regional development corridors that are crucial in promoting intra and inter-county commerce. These growth corridors are expected to improve food availability and access for all Liberians.

USAID FED's methodology is market-led and value chain-driven; it is committed to developing indigenous capacity building, with a specific focus on Liberia's women and youth.

USAID FED is implemented by five partners: Development Alternatives, Inc. (DAI), Winrock International, International Fertilizer Developmental Center (IFDC), Louisiana State University (LSU), and The Cadmus Group.

Executive Summary

On May 14, 2015 USAID FED hosted a high level delegation from USAID Washington, White House National Security Council, and the Congressional Liaison Office. The delegation visited one youth farming group in Margibi County called See Yourself Farming Group. This farming group is currently growing okra for export to the European markets. After visiting the farm, the delegation toured Fabrar Liberia Inc. rice processing facility at Kakata, Margibi County, which was supported by USAID FED. After completing the facility tour, the delegation participated in a round table discussion with USAID FED supported farmers and other beneficiaries representing all four USAID FED value chains. The delegation from Washington DC was headed by Eric Postel, Associate Administrator, USAID and John Mark Winfield, USAID Liberia Mission Director.



Figure 1: USAID high level delegation with USAID FED and farmers during the round table discussion hosted in Kakata, Liberia.

During May, a total of 419.35 MT of FY14 rice crop was sold at a value of USD \$206,781. A cumulative total of 3,110.89 MT of FY14 rice crops have been sold at a value of USD \$1,410,844.53 year to date.

On May 20, 2015, USAID FED in collaboration with the Government of Liberia (GoL) inaugurated the Liberia Business Incubator (LBI) Cassava Processing Facility in Virginia, Monsterrado County. The Honorable Speaker of the House, Alex Tyler, US Ambassador Deborah Malac, the Honorable Minister of Commerce and Industry (MoCI), Axel Addy, other GoL Officials, cassava farmers and representatives from development organizations officially launched the facility in the outskirts of Monrovia. LBI, a fully incorporated woman owned Liberian business which is also run as an agriculture holding firm, was created in 2010. LBI adds value to cassava by processing it into gari, fufu and cassava flour. USAID FED supported LBI with improved cassava processing equipment worth USD \$44,950, which will enable the enterprise to process 5 MT of cassava per day instead of the previous 2 MT daily. LBI employs 6 staff but now with the added capacity will increase its staff to 14 full time employees.

USAID FED has a partnership with LEAD that links farmers with access to financing from LEAD so that they can receive loans to improve their farms. In May, LEAD increased the Zeelie Farmers Association loan from USD \$10,000 to USD \$24,000. John Selma, the head of the group and a USAID FED supported beneficiary of Zeelie, is the recipient of the loan. USAID FED is helping John Selma to acquire a truck to facilitate and grow his rice trading business.

USAID FED Component Three organized a power tiller operations and maintenance Training of Trainers (ToT) for agro technicians and instructors at three CoE's during the reporting period. The objective of this training is to train the CoE students and staff on the use of power tillers to improve the production and efficiency of farming on their demonstration farms. In addition, the power tiller operators will provide their services to the surrounding community farmers for the promotion of income generation and for the maintenance of the equipment. The five-day training commenced on May 12, 2015, at Nimba County Community College (NBCC) and was followed by Lofa County Community College (LCCC) and the Booker Washington Institute (BWI). GBCC training will follow upon receipt of a power tiller from USAID FED.

Component One: Increase Agricultural Productivity and Profitability

Task 1A: Increased Productivity and Profitability of the Rice Value Chain

Rice Sales from FY14

During May, a total of 419.35 MT of FY14 rice crop was sold at a value of USD \$206,781. A cumulative total of 3,110.89 MT of FY14 rice crops have been sold at a value of USD \$1,410,844.53 year to date (Table 1).

Table 1: FY14 Rice crop sales

County	Sales volume as of April 2015 (MT)	Sales value as of April 2015 (USD\$)	Sales volume May 2015 (MT)	Sales value May 2015 (USD\$)	Sales Volume YTD (MT)	Sales value YTD (USD\$)
Lofa	1,845.09	\$737,335.31	145.00	\$56,950.00	1,990.09	\$794,285.31
Nimba	35.50	\$17,216.32	0.00	\$0.00	35.50	\$17,216.32
Bong	772.28	\$435,013.90	274.35	\$149,831.00	1,046.63	\$584,844.90
Grand Bassa	38.67	\$14,498.00	0.00	\$0.00	38.67	\$14,498.00
TOTAL	2,691.54	\$1,204,063.53	419.35	\$206,781.00	3,110.89	\$1,410,844.53

Improving productivity and profitability of upland rice

During May, 45 ha of additional upland were prepared for upland rice cultivation. In total, 2,994.5 ha, 30 ha more than the target for FY15, have been cleared by 11,296 new farmer beneficiaries in preparation for FY15 upland rice production in 297 sites. Additionally, 54.5 ha have been cleared for demonstration, completing the target of 297 ha for demonstration, i.e., 1 ha per site.

USAID FED also completed distribution of seeds of improved rice varieties to all the new upland farmer beneficiaries. Each beneficiary received an average of 17.6 kg of Nerica L-14 seed, which is sufficient for planting approximately 0.25 ha. The aim is to expose the farmers to this better variety, and to provide each of them good seeds that they can plant in a bigger area in the next cropping season.

Expanding lowland rice production

During May, the 11,154 selected farmers (6,062 male and 5,092 female) had cleared a total of 1,024.5 ha of lowlands for FY15 lowland rice production. In total, 3,020.06 ha of lowlands had been cleared against a 3,545.90 ha target. The rest of the area will be cleared in June 2015.

By the end of April, 267 ha of demonstration fields had been cleared across the four counties. In May, de-stumping, bunds and canal lay out was completed on 257 ha, representing 96% of the total area for demonstration.



Figure 1: Lowland clearing and field layout in Mamai Town, Voinjama District.

USAID FED also completed distribution of Nerica L-19 seeds to all new lowland farmer groups across the counties during the month of May. A total of 28.112MT of Nerica L-19 seeds have been distributed, representing 100% of the target.

Enhancing mechanization for lowland rice production

USAID FED promotes mechanization of lowland farming through the use of power tillers, paddy drum-seeders and cono-weeders. The purpose of mechanization is to reduce drudgery and improve efficiency.

A total of 30 power tillers have been procured. The distribution of these power tillers and training of youth operators were planned in May. However, due to competing priorities, these have been delayed and will be carried out in June 2015.

The cono-weeders (20 units) have been procured and are ready for delivery to the counties. However, for cost-effectiveness, USAID FED will transport these cono-weeders together with the paddy drum seeders. The purchase orders for the paddy drum seeders will be released once approval from USAID is received.

Promoting use of fertilizers in rice production

During the reporting period, 44.55 NPK fertilizers and herbicides were distributed to all FED-supported upland areas for use in demonstration sites. The goal is to demonstrate the benefits of fertilization and use of herbicides, both in terms of improved yields as well as reduced cost to control weed compared to manual weeding.

All required fertilizers (Triple Superphosphate, Muriate of Potash and Urea) have also been supplied to all the lowland demonstration sites during the reporting period (Table 2).

Table 2: Fertilizer distribution by County.

County	Fertilizer type	Quantity (kg)
Bong	Urea	35,392
	Urea Briquette	22,720
	TSP	15,666
	MOP	11,109
Nimba	Urea	26,645
	Urea Briquette	16,598
	TSP	11,221
	MOP	8,000
Lofa	Urea	18,091
	Urea Briquette	10,802
	TSP	7,890
	MOP	5,223
Grand Bassa	Urea Briquette	1,000
	TSP	700
	MOP	502
TOTAL		191,559

In addition to demonstrating fertilizer use through demonstration sites, USAID FED will also demonstrate the use of a color chart that will help to determine Nitrogen deficiency in the different parts of the farmer's field. The leaf color charts were delivered to USAID FED towards the end of May. A training of LNGO and USAID FED extension staff on the use of the leaf color chart will be conducted by USAID FED's Rice Technical Specialist on June 9. The charts will be distributed shortly after the training. The LNGO's and USAID FED extension staff will train the farmers on the use of the leaf color charts.

Promoting 2 rice crops per year

By the end of May, 10 new spillways in Lofa County were completed. Construction in all 30 FY15 sites is anticipated to be completed by the end of July.

In total, 15 ha out of the 50 ha supported by 12 FY14 spillways are currently double cropping. USAID FED carried out an investigation for this low turnout in the second crop cultivation. It was found that the farmers lack an understanding of the cropping calendar for the second crop. To address this issue, USAID FED is developing a cropping calendar for the second crop, and will be training farmers in the areas where the spillways were constructed.

Enhancing post-harvest practices

FY14 Rice business Hubs:

During May, the FY14 rice business hubs in Lofa and Nimba Counties processed a total of 20 MT of paddy rice and sold milled rice valued at USD \$14,100 in the communities. To date, the hubs have processed and sold 68 MT of 50 kg rice to the World Food Programme and community markets at a total value of USD \$48,660.

The selection of sites and beneficiary groups for the nine rice business hubs to be constructed in FY15 were finalized during the month of May (Table 3). The criteria for selection of groups and sites are beneficiaries' ability to cost share and a critical mass of rice farmers in the surrounding area. USAID FED went as far as verifying the availability of trees, sand, and gravel that the farming group can contribute towards the construction of the facility.

Table 3: Selected rice business hubs sites.

County	Proposed hub location	Farming Group	GPS Coordinates
Bong	Zowien-ta	Leelah Agriculture Business Coop	29N-0479071 ; UTM-0753606
	Salala	Salala Yalafama Association	29N-0377706; UTM-0746012
	Sinyea, Suakoko	Sumo's farm	29N-043888; UTM-0779252
Lofa	Kahenjala	Kahenjala Farmers Association	29P-0379115; UTM-0920083
	Foyah	Barliloe Farmers Association	29P-0371491; UTM-0935109
	Foyah	Mayor Farmers Association	29P-0365193; UTM-0925001
Nimba	Gorkor Town, Tappita	Gbondeamon Farmers Association	29N-0493978; UTM-0703504
	Karnplay	Zoedwar Farmers Association	29N-0554817; UTM-0802252
	Zoeluapa	Zoeluapa Farmers Association	29N-0523982; UTM-0779291
	Gorkor Town	Gbondeamon Farmers Association	29N-0493978; UTM-0703504

The selection process for companies to construct the rice business hubs commenced during the reporting period. USAID FED anticipates the contracts for the construction of the additional rice business hubs to be awarded in late June or early July. The aim is to start the construction by the middle of July. USAID FED's county offices are working with the selected farming groups to ensure the community's counter-part (gravel, sand and wood) is at the site when the building contractors arrive on site.

Stimulating private sector investment in commercial rice production

During May, Fabrar Liberia Inc. met with the Ministry of Commerce and Industries (MoCI) to work out contracts for the supply of local rice to the Government of Liberia (GoL) for the Independence Day Celebration. Fabrar signed a contract with the MoCI to supply 17.5 MT of milled rice for this event. Fabrar is also working with other Government of Liberia (GoL) Ministries to secure a contract to supply 300 MT of rice to their employees for the same Independence Day program.

Task 1B: Increased Productivity and Profitability of the Cassava Value Chain

FY14 cassava crop harvests and sales

A total of 3,565 MT of cassava tubers was harvested from 197 ha of FY14 FED-supported fields in May. The reported year to date total volume of cassava crop harvested comes to 9,028 MT from 497 ha of land planted in FY14.

During May, a total of 2,989 MT of cassava tubers was sold for USD \$157,716.19. This brings the total of cassava tubers sold to 8,181 MT year to date from the FY14 crop for a value of USD \$444,767.

Facilitating access to high yielding cassava varieties

USAID FED continued to manage the two cassava screening sites in Lofa County in close collaboration with CARI. Out of 11 varieties screened, CARI has released nine varieties for multiplication (Table 4). Two varieties, IITA-TMS-01/1371 and IITA-TMS-01/1368 were not released as they exhibited symptoms of cassava mosaic virus on varieties planted at CARI's screening site. The disease was not observed with the varieties at the Lofa screening sites.

Table 4: Improved varieties shortlisted for release.

VARIETIES	LOCATION	DATE OF PLANTING
IITA-TMS-9000581	Lofa	May, 2014
TME419	Lofa	May, 2014
IITA-TMS-IBAO11412	Lofa	May, 2014
IITA-TMS-IBA30572	Lofa	June, 2014
IITA-TMS-IBA010040	Lofa	June, 2014
IITA-TMS-IBA-980505	Lofa	June, 2014
IITA-TMS-IBA950289	Lofa	June, 2014
IITA-TMS-IBA920057	Lofa	June, 2014
IITA-TMS-IBA961632	Lofa	June 2014

Linking cassava farmers to commercial nurseries

Several acquaintance meetings between 15 kuus and four commercial nurseries owners have been carried out in Bong County. The meetings resulted in sales of 546 bundles of disease-free and improved cassava cuttings valued at USD \$2,730.

Enhancing knowledge on improved varieties and technologies

During May, a total of 488 ha of land was planted under the FY15 cassava crop production program. In total, 2,178.30 ha have been planted year to date, representing 61% of the total target of 3,564 ha of new cassava farms to be supported in FY15. It is anticipated that planting will continue until August.

To date, 305 kuus have received 3,245 bundles of cassava cuttings (Carica 1, Carica 2 and TMS series) from USAID FED. Cassava cuttings will be delivered to the rest of the 343 kuus as soon as they get their fields ready for planting.

Additionally, a total of 454 kg of peanuts were distributed to 129 kuus to demonstrate ISFM through crop rotation with legume.

A total of 264 ha of demonstration sites have been prepared with mounds and ridges, representing 81% of the targeted 325 ha of demonstration sites to be developed.

Improving access to cassava markets

In May, USAID FED in collaboration with the Government of Liberia (GoL) inaugurated the Liberia Business Incubator (LBI) Cassava Processing Facility in Virginia, Monsterrado. In FY15, USAID FED provided LBI with cassava processing equipment worth USD \$44,950. This included a generator, cassava peeler, hammer-mill, cassava roaster for gari production, cassava dryer and cassava sifters. LBI invested USD \$35,760 towards construction of the facility as their cost share. LBI will use the facility to process gari, fufu and cassava flour. With this recent upgrade, LBI will increase its processing capacity of tubers from 2 MT to 5 MT per day. This facility will also procure cassava tubers from FED supported farmers.

Upgrading Processing Capacities of Community-based processors

A total of 18 out of 22 micro-processors had fully installed processing equipment they received from USAID FED. The remaining four processors await financing from LEAD for the renovation of their facility before they can install the equipment provided by FED.

USAID FED linked 25 cassava processors to LEAD for possible financing. LEAD is currently conducting due diligence on these applications for possible loan approvals and disbursements.

Task 1C: Increased Productivity and Profitability of the Horticulture Value Chain

During May, the FY14 vegetable farm clusters harvested and sold 36 MT of vegetables for USD \$29,659.08. A total of 187 MT of vegetables has been harvested and sold for USD\$140,599.64 year to date from the FY14 clusters.

During the same period, 60 MT of vegetables from the FY15 beneficiary farms were harvested and sold for USD \$60,564.62. A total of 310 MT of vegetables has been harvested and sold for USD \$256,796.33 year to date from the FY15 clusters. This brings the total sales of vegetables to USD \$397,396 year to date.

Vegetables in the FY14 rain shelters

In May, production of vegetables (cabbage, cucumber, African eggplant and tomatoes) continued within the rain shelters. However, high temperatures within the rain shelters were observed. It is anticipated that during the rainy season, temperatures in these shelters will be much cooler, allowing for a more conducive environment for production of the more temperature-sensitive vegetable varieties.

An improved design of the rain shelters that will allow for better aeration during the dry and hot weather were procured by USAID FED in FY15.



Figure 2: The Speaker of the House, Hon. Alex Tyler and the US Ambassador Deborah Malac cutting the ribbon at LBI's facility.



Figure 3: Ms. Ruggie Barry, CEO of LBI guiding the guests in the processing facility during the launch.

Promoting Integrated Pests Management Practices

By the end of May, 188 demonstration sites had been established across the 188 clusters within the six counties. 57.15 ha of land were prepared and planted with watermelons, cucumbers, cabbages, chili pepper, black beauty eggplant and African eggplant.

All the 188 demonstration sites had been provided with improved seeds and pesticides to demonstrate Integrated Pest Management (IPM).

During May, the Senior Horticulture Specialist provided technical assistance on Good Agricultural Practices (GAP) and IPM to vegetable clusters and to the 25 youth in agribusiness pilots in Montserrado and Margibi Counties.



Figure 4: USAID FED's Senior Horticulture Specialist assisting farmers to lay plots for Okra production at Bernard Curve, Todee district.

Reducing harvesting and post-harvest losses

In line with improved post-harvest handling of vegetables, a total of 940 plastic crates had been distributed to the 188 clusters and 250 crates were provided to five trader associations (Table 5 & 6) during the month of May.

Table 5: Distribution of crates by county.

County	Number of clusters	Number of crates per cluster	Total Number of crates distributed per county
Montserrado	51	5	255
Margibi	38	5	190
Bong	27	5	135
Nimba	28	5	140
Lofa	25	5	125
Bassa	19	5	95
Total	188		940

Table 6: Distribution plan for packaging crates for trader associations.

County	Number of Association	Number of crates distributed per Association
Margibi	1	50
Bong	1	50
Nimba	1	50
Lofa	1	50
Bassa	1	50
Total	5	250

Additionally, all materials required for the establishment of 18 charcoal coolers in the counties have been supplied. The construction of the Zero Energy Cooler for Kakata Marketing Association commenced in Kakata, Margibi County during the reporting period. It is anticipated that the construction of all 18 charcoal coolers and 5 pending zero energy coolers will be completed by the end of August.

Off-season vegetable production (during the dry and very wet months)

A total of 360 drip irrigation kits were delivered to USAID FED during the last week of May. These kits will be distributed to 18 high value vegetable clusters in June and July in preparation for the next dry season production starting in October/November.

Additionally, 188 motorized pumps were delivered to USAID FED during the same period. These pumps will be distributed to 188 vegetable clusters beginning in June and utilized during the dry season starting in October 2015 through May 2016.

Improve wet season production through protected cultivation

Eight rain shelters were installed in the FY15 sites in Montserrado and Margibi during the month of May (Table 7). Upon installation, tomatoes were planted in the shelters. It is anticipated that installation of the remaining 10 shelters will be completed in July.

Table 7: Rain shelters installed in FY15 sites.

County	Number of high value vegetable sites	Number of rain shelters delivered	Number of rain shelters installed to date
Montserrado	6	6	6
Margibi	5	5	2
Bong	2	2	0
Nimba	3	3	0
Bassa	2	2	0
Total	18	18	8



Figure 5: Rain shelter installed at Home of Destiny cluster in Brewerville, Montserrado County.

USAID FED and Grain Coast Inc. (GCI) held several meetings to follow up on the requirements for the export of okra to France. During these discussions, it emerged that GCI is experiencing difficulties in meeting its cost share obligations. In order to continue with the export program, USAID FED identified two alternative private sector firms, ROSNA and Gboimah Farm. ROSNA has expressed strong interest in being a partner. VS.CO, the buyer in France, has been informed of additional USAID FED-supported potential exporters of vegetables. VS. CO re-affirmed its interest to source okra from Liberia. Brussels Airlines is also helping the export initiative by providing information on the SPS requirements to get the product into the EU market. Currently, a total of 11 ha are planted with okra with the variety preferred by the buyer. Some fields, however, are showing serious problems. Based on the assessment of USAID FED's Horticulture Expert, Emmanuel Owusu, the variety *Clemson spineless* appears very susceptible to mosaic virus. USAID FED has communicated with the buyer to find out if other varieties such as *Indiana*, *Pusa Sawani* and *Varsha* would also be acceptable. These varieties are known to be less susceptible to mosaic virus.



Figure 6: Construction of Zero Energy Cooler at Kakata, Margibi County.

Task 1D: Increased Productivity and Profitability of the Goat Value Chain

FY14 Goat production sites - kidding and mortality rates

During the month of May, 81 does from the FY14 goat production intensification sites gave birth to 146 new kids (74 male and 72 female), bringing the total herd size in FY14 goat production intensification sites to 8,059 goats (4,684 does, 1,631 bucks and 1,744 kids). By the end of May, 546 kids (333 males and 231 females) born during the month of December 2014 reached maturity and were added to the doe and buck statistics.

During May, a total of 65 goats (10 bucks, 38 does and 17 kids) from the FY14 goat production intensification sites were reported dead in Lofa County. In total, 565 goats had been reported dead from USAID FED supported and non-FED supported communities in Lofa County. The cause of these deaths is suspected to be Peste des Petits Ruminants (PPR) suspected to have been introduced by goats imported from Guinea. However, this needs to be verified through proper laboratory tests. USAID FED will be meeting with MoA to discuss next steps to control this potential outbreak of PPR.

As an emergency measure, goats showing symptoms within USAID FED-supported goat production intensification sites were treated with *Oxytetracycline*. Positive response to *Oxytetracycline* was observed. However, further tests will be done in June through laboratory analysis of the samples.

FY14 goat production sites - access to veterinary care

During May, 720 animals in 33 communities in Bong, Lofa and Grand Bassa were treated by a total of 18 Community Animal Health Workers (CAHW's) for various illnesses.

USAID FED's Lofa County office purchased veterinary drugs valued at USD \$180, and provided these to CAHW's to treat animals and avert the spread of the disease suspected to be PPR. The CAHW's treated a total of 329 goats with the drugs from USAID FED. Since the drug was supplied by FED for free the CAHWs did not charge the farmers and also offered their services for free in order to prevent the escalation of the disease outbreak. Under normal circumstances CAHWs charge fees for their services.



Figure 7: Community Animal Health Worker Nancy Morris treats a goat in Leobengu, Lofa County.

During May, USAID FED contracted LNGO's conducted a survey to ascertain the profitability of the FY14 CAHWs and agro-pharmacists. The survey data has been submitted to the M&E Unit for analysis. Based on result of the survey, follow up actions will be undertaken to either replicate agro-pharmacist and CAHW services or institute a different approach to veterinary services in FY15 and FY16.

FY15 Goat production sites - kidding and mortality rates

During May, a total of 233 new kids (94 male and 139 female) were born in the FY15 goat production intensification sites. The total herd size in FY15 goat production intensification sites stands at 6,509 goats (3,285 does, 1,278 bucks and 1,946 kids).

Goat sales

In May, a total of 260 goats from FY14 sites were sold for USD \$14,524. In total, 2,875 goats from the FY14 production intensification sites have been sold for USD \$153,956.88 year to date. During the same month, a total of 201 goats from FY15 sites (56 Does and 145 Bucks) were sold for USD \$9,746. In total, 1,448 goats from the FY15 production intensification sites have been sold for USD \$76,763 year to date. This brings the total goat sales from USAID FED supported goat farmers to USD \$230,720.

Promoting Goat Shelters

By the end of May, a total of 35 sawyers produced 19,907 pieces of planks towards the construction of goat shelters. These planks are sufficient for the construction of shelters in 45 sites. Wood for the rest of the 32 sites still needs to be produced.

During May, 34 carpenters completed the construction of shelters on eight goat production intensification sites (Table 8).

Table 8: Number of shelters constructed in FY15 goat production intensification sites.

County	Number of carpenters recruited	Number of shelters required	Number of shelters built in April	Number of shelters built in May	Total Number of shelters built YTD	Shelters outstanding for completion
Nimba	14	26	0	6	6	20
Bong	11	22	0	0	0	22
Grand Bassa	10	10	0	1	1	9
Lofa	10	19	0	1	1	18
Total	45	77	0	8	8	69

Construction of two wells in Grand Bassa County

During April, construction of the two water wells for the FY14 goat production intensification sites in Neorpeh and Blaygbah in Grand Bassa County commenced. These two wells will be completed and operational by the end of June.

Salt Lick production training for satellite communities

On May 12-13, 125 livestock chairmen from satellite communities received two days training on goat herd management and mineral/salt lick production in Lofa, Bong, Grand Bassa and Nimba counties. USAID FED is providing mineral lick ingredients (oyster shells, salt and cement) to 125 communities. The salt licks are anticipated to benefit at least 2,500 goat farmers in satellite communities.

National PPR Campaign

During May, a total of 2,080 PPR vaccine vials were handed over to the MoA. These vaccines will be used during the PPR campaign tentatively scheduled to begin in September 2015. The vaccines are being stored at the National Drugs Service (NDS) cold storage facilities in Monrovia.

Procurement of the ELISA Plate Reader is still in progress. The Elisa plate reader will be used to conduct serological tests to determine the antibody response levels of animals before and after the vaccination exercise. It is anticipated that the ELISA Reader will arrive in Liberia in June, after which collection of blood samples for testing will be conducted. Following the suspected outbreak of PPR virus in Lofa County, the need for the ELISA plate reader becomes more urgent.

Establishment of nucleus breeding herd

A mission to Suakoko, Bong County was conducted on May 28, 2015 to assess the joint CARI, Land O' Lakes (LOL) and USAID FED partnership,



Figure 8: Neorpeh site water wells nearing completion, Grand Bassa.



Figure 9: PPR Vaccine vials at the National Drug Service cold storage facility in Monrovia.

as well as the status of the establishment of a nucleus breeding herd at CARI. Under the partnership, USAID FED was to provide infrastructure development support towards the establishment of a facility, while LOL was to import goats towards establishment of a nucleus breeding herd.

The meeting was attended by USDA, USAID Liberia, Land O' Lakes, CARI and USAID FED representatives. During the meeting Ms. Ingrid Argosoediro, Senior Analyst at USDA, stated that USDA is conducting a compliance review of LOL projects in Liberia. USDA will provide all partners with a final assessment of whether LOL will continue with activities in Liberia, upon which the concerned parties will develop new timelines. During the meeting, it was also agreed that:

1. Establishing the nucleus breeding herd remains a priority for all parties.
2. USDA will revert with a final position on LOL by the end of June.
3. CARI will provide USAID FED with structural adjustments requirements needed for the quarantine facility and cost in order to serve the purpose of a nucleus breeding center.
4. USAID FED will assist CARI using its in-house engineer to determine the civil works requirements for structural adjustments.
5. CARI, USAID FED and USAID Liberia will discuss whether the proposed structural adjustments can be funded.
6. LOL will ensure CARI personnel are involved in the selection of nucleus breeding herd.
7. In case, USDA/LOL is unable to import the 100 goats for the nucleus breeding herd, the alternative option agreed upon is to source in-country.



Figure 10: Trader IC, Jeff Samah, trains farmers on selection of animals for market in Vanyan, Bong County.



Figure 11: Traders and goat farmers at the marketing event in Melekie, Bong County.

Formalizing livestock market

During May, USAID FED's contracted Independent Consultant (IC) Trader provided training to 80 goat farmers and 52 goat producers from satellite beneficiary communities on how to select and fatten animals for sale.

Goat marketing events

During May, USAID FED facilitated a goat marketing event at Jorquelleh cluster in Melekie, Bong County. 24 USAID FED-supported goat producers and four traders participated in the event. A total of 47 goats (40 Bucks, 5 does and 2 kids) were sold for a total value of USD \$3,550. This translated to an average of USD \$75 per animal. Product standard specifications like girth, sex, and other attributes to determine the price were determined prior to the event. One challenge experienced at the event was that farmers were seen transporting their animals on motorbikes, which might cause mortality if an accident occurs. In addition, there would be weight loss due to stress if goats are transported far distances and no feed and water is provided. Therefore, USAID FED is recommending that the next marketing event be conducted in more than one area in one day across clusters that are proximally located to prevent the transportation of goats on motorbikes by farmers.

Improving nutrition for higher livestock value

During May, USAID FED commenced the coaching of goat farmers in Grand Bassa, Bong and Nimba Counties on feeding strategies using the three selected forage species (Moringa, Centrocema and Pennistenum purpureum). A total of 34 goat farmers were trained on forage cultivation and feeding of herds. It is anticipated that forage seeds and planting materials will be procured and distributed to farmers for cultivation in June. The Forage Production Expert will also monitor the effects of proper feeding on animal weight and health in June.



Figure 12: Farmers being coached on feeding strategies in Bong County.

Sub Task 1.1 Special Studies and MoA Data Collection System Development

USAID FED has conducted interviews for potential candidates for two Special Studies Advisors and is preparing the paperwork for USAID approval. The STTAs are estimated to arrive in Monrovia towards the end of June.

The M&E team has completed a sample framework, aligned to the USAID FED baseline study, which will serve as a standard sampling methodology for all special studies. The rationale for establishing the standard sampling framework is to have a proportional representation of individuals and/or households within USAID FED's zone of influence who will participate in the survey including beneficiary groups and controlled (non-FED) groups. This strategy aims to provide an easy method for data analysis, projections and comparison in any given period during the LOP. This documented statistical tool will also serve as the main source of the technical and statistical verification/checking of the credibility of data collected by the USAID FED.

Questionnaires were developed on the following survey areas:

1. Post-Harvest Losses in Vegetables for USAID FED and Non-FED farmers
2. Post-Harvest Losses in Rice for USAID FED and Non-FED farmers
3. Average Household Diet Diversity Score for FED and Non-FED farmers
4. Study on the impact of goat production intensification site on weaning rate
5. Three questionnaires on the post-harvest losses and the diet diversity were pre-tested in the field as a usual step towards the conduct of the data collection in collaboration with USAID FED's sub-contracted Local Non-Government Organizations (LNGOs).

Piloting quality assurance of the database system design

As part of a regular process in designing a software/database system, a technical database assessment was conducted in the counties and Monrovia by HAK Technology in collaboration with the USAID FED M&E team. The technical documents include the 26 indicators/variables to be included in the newly proposed online database system for USAID FED.

The designing of the system is ongoing and is expected to be functional at the end of July 2015.

A user's training manual will be developed and training will be conducted by HAK Technology, the company developing the system, for USAID FED staff and the MoA central and county-based staff. USAID FED will test first the effectiveness of the system before rolling out the installation and utilization at the MoA.

MoA M&E Staff Capacity Development:

A training manual was developed for MoA M&E staff capacity development during May. This included four modules; Module I –Overview of the Monitoring and Evaluation, Module II - Overview of the Data Management, Analysis and Reporting, Module III – Simple descriptive statistics using Microsoft Excel data sheets and, Module IV - Procedures for Data Collection and Reporting. The training workshop is scheduled from June 3 to 5 in Bong County. The expected number of MoA participants will be 12 (1 female and 11 male).

Sub Task 1.2 Improved access to Agricultural Inputs

Support the establishment of commercial production and marketing of rice seed

By the end of May, producers had cleared a total of 435 ha of land for rice seed production in FY15. USAID FED will deliver 10 MT of rice seed to the lowland sites and 6 MT of rice seed to the uplands sites in June. Planting on the upland sites will commence during the second week of June, while planting on the lowland sites is expected to start by the end of June.

In May, USAID FED contracted 15 seed inspectors to monitor rice seed production in 22 FY14 sites and 58 FY15 sites to ensure that the necessary protocols in seed production will be followed. The rice seed inspectors will be deployed to the field in June when planting on the sites is expected to begin.

USAID FED held discussions with, RASTHOM Inc., for potential partnership in commercial production and marketing of rice seed in Liberia. RASTHOM Inc. is a company with mining interests in Liberia. The firm is interested in diversifying its investments by exploring opportunities in the agriculture sector. A concept note is being developed by both parties to map out a potential model where RASTHOM will find it less risky to invest in the development of an Input Supply business and in particular commercial rice seed marketing. It is anticipated that RASTHOM will make a decision on moving forward with the investment or not during the month of June.



Figure 13: USAID FED irrigation Specialist receiving Foundation seed from CARI Staff in Suakoko, Bong County.

Foundation seeds from MoA

The MoA provided USAID FED with 10 MT of Nerica L19 foundation seed for Lowland and 6 MT of Nerica 8 foundation seed for the upland. The foundation seeds will be distributed by USAID FED to the rice seed multiplication (RSM) sites in June.

Implementing the Seed Regulation

Discussions were held in May with key stakeholders in support of collaborative efforts aimed at establishing a framework for implementing ECOWAS seed regulations in Liberia. The results of these efforts are reported under the Component Two section of this report.

Support to commercial production and marketing of cassava cuttings

On May 20, USAID FED received final approval from CARI to proceed with harvesting of cassava cuttings from nine varieties of imported cassava varieties being screened in Lofa County. By the end of May, the 40 commercial nurseries had completed land preparation on 60 ha for multiplication of these varieties. It is

anticipated that harvesting on the screening sites and distribution of the cuttings to the 40 commercial nurseries will be completed by the third week of June.

Support to commercial production and marketing of vegetable (including legumes) seeds and seedlings

USAID FED has still not found firms interested in investing in the development of local brand of vegetable seeds. A meeting is scheduled for the end of June to bring together agro-input supply companies and agro-dealers to discuss challenges they are facing with respect to availability and access to agriculture inputs (including rice and vegetable seeds), barriers to investing in production and marketing locally as well as opportunities that could be leveraged. The outcome of this meeting will directly affect the implementation of Task 1.2.1.3.3 (*Private sector supported to embed vegetable seed supply as part of contract growing scheme*).

Awareness campaign on benefits of agro-inputs through radio and other platforms

During May, USAID FED received approval from USAID to deploy the Agro-Input Supply Specialist STTA, Mr. John Hurell. The STTA will commence his assignment in June. This STTA position will prioritize UDP adoption with FY14 lowland rice farmers and support to bulk procurement and group marketing.

Promoting UDP, MoP and TSP use in rice based on soil analysis

During May, the Input Supply Unit used the results from 100 soil sample analyses to plot the soil fertility status of FED supported sites where these soil samples were obtained. The sample map was plotted with the assistance of the Liberia Institute of Statistics & Geo-information Services (LISGIS). It is anticipated that by July, a comprehensive improved map will be plotted based on the analysis of soil samples conducted by the Centers of Excellence.

UDP+ System of Rice Intensification (SRI) research

During May, monitoring of the four UDP+SRI trial sites in Bong and Nimba Counties continued as scheduled. It was observed that spacing and number of plants per hill has significant impacts on the quantities of tillers per plant. Treatments with 25cmx25cm spacing and one plant per hill produced 71% more tillers (averaging 35 tillers per plant) in comparison with treatments with 20cmx20cm spacing and three plants per hill (which averaged 14 tillers per plant). It is anticipated that the increased number of tillers will translate to an increased number of panicles. It was observed that vigorous growth corresponds with wider spacing.



Figure 14: Farmer showing plant with 38 tillers at Garmue2.

The UDP+SRI study is expected to be completed by July. A complete report will be ready by August.

Sub Task 1.3 Agricultural Extension Support

Development of de-concentration and decentralization strategies with MoA

During May, the Extension Support Unit developed a draft diagram illustrating the proposed de-concentration and decentralization strategy. A Technical Agriculture Core Team meeting has been scheduled for June 5 to validate the diagram illustration. The final approved illustration will be presented at the Agriculture Coordination Committee (ACC) meeting in June.

Development of standardized agricultural extension curricula

In May, USAID FED continued to work on the goat production extension curriculum. The validation of the goat production curriculum will take place on June 23.

During May, the Extension Support Unit revised the rice, cassava and horticulture curricula as per recommendations made by participating organizations during the validation workshops in April. The revised curricula are being used to guide the development of extension materials for extension officers and farmers. It is anticipated that all extension materials for rice will be ready for validation by the first week of July, while those for cassava and vegetables will be ready in the second and third week of the same month.

The curricula development and material dissemination is an integral part of MoA's de-concentration and decentralization strategies. During July, it is anticipated that all the extension materials for the four value chains will be developed and be validated in August.

Development of extension material and information access points

During April, extension materials were revised in order to simplify the material for use at the farmer level. Under the rice value chain, three booklets were revised (*Land preparation, Nursery preparation and planting* and *Rice stand establishment*). Under the vegetable value chain, four farmers' guides were developed for chili, onion, okra and tomatoes. Under the cassava value chain, four farmers' guides were also developed addressing *Selection and preparation of planting material, Integrated Soil Fertility Management, harvesting and storage of cassava* and *Cassava Stem planting methods*. These guides will be fully completed in June once all illustrations are received from USAID FED's contracted graphic designer and incorporated into the material.



Figure 15: Snapshots of rice extension materials that have been developed.

Extension support through radio

After deliberations on how to cost-effectively proceed with the airing of *On the Farm* radio program, a decision was made to continue with the development of content material for airing through United Methodist Radio in Monrovia. United Methodist Radio signed an MoU with USAID FED during January towards providing 30 minutes of broadcast time to USAID FED at no cost. United Methodist Radio will commence broadcasting of *On the Farm* in June. During the month of May, four editions of *On the Farm*

previously produced for broadcasting by UNMIL radio were re-edited by the Extension Support Unit for broadcasting by United Methodist Radio.

By the end of May, USAID FED had received reports and copies of programs aired by the four community radio stations. The partnership agreements between the four community radio stations and USAID FED end in June 2015. A listeners' survey may be implemented with support of the M&E Unit during the quarter four reporting period to determine the impact of these programs within USAID FED's zone of influence. This will determine the decision on whether the partnership with the community radio stations will be renewed.

Sub Task 1.4 Youth in Agribusiness

Establishment of agribusiness horticulture pilots

During May, USAID FED's M&E Unit commenced the review of baseline data collected and submitted by Green Coast Agriculture Program (G-CAP), the LNGO contracted to provide technical assistance to the 25 youth agribusiness pilot programs. The baseline information includes land size under cultivation, production and sales prior to USAID FED support. A final baseline report for all FED supported value chains will be made available by the M&E Unit in June.

During May, all the 25 demonstration plots were prepared for planting. By the end of May, a total of 6.03 ha had been planted. It is anticipated that the remaining 0.22 ha will be planted in early June. The 25 youth groups received and established nurseries for okra, African eggplant, cabbage, cucumber, chili pepper and bitter ball. By the end of May, they had cultivated a total of 72.47 ha of their individual land. It is anticipated that all the 125 ha will have been planted with vegetables by the end of June.

Job creation through youth extension aides

During May, the 25 youth extension aides employed by G-CAP commenced field training of 25 lead farmers on GAP (Good Agricultural Practices) and IPM (Integrated Pest Management) for vegetable production. The technical support to lead farmers and the 500 youth by G-CAP will run for a period of 90 days.

Job creation through youth as transport service providers

During May, USAID FED completed the verification process of newly identified entrepreneurs from Bong and Lofa Counties for cost-sharing of community logistics services called "tuk-tuk". A "tuk-tuk" is a motorbike with a carrier at the back that will allow transport of products such as cassava tubers, rice and vegetables from the farm to community markets, processors or trading centers. It is anticipated that verification of entrepreneurs in Nimba and Grand Bassa will be completed in early July. FED Component Two will provide technical assistance to these new entrepreneurs to ensure that their businesses are registered and that they have viable business plans.

Job creation through youth as power tiller service providers



Figure 16: See Yourself Agriculture youth group members preparing land for planting at Todee, Montserrado County.



Figure 17: Okra ready for harvest at See Yourself Youth Group plot in Todee.



Figure 18: Youth group members at Todee, Montserrado receiving training on nursery management from extension aide.

During May, USAID FED developed training material and commenced preparations for power tiller training for the 20 entrepreneurs who had been selected as recipients of power tillers. This three-day training is scheduled to take place from June 16-19 when all the power tillers will have been distributed to the counties. A ceremony to hand over the power tiller equipment to the 20 youth entrepreneurs will take place sometime in the third week of June in Suakoko, Bong County.

Job creation through youth as machine operators

During May, USAID FED's Senior Agro Technician completed the development of training manuals on how to operate cassava processing equipment. The completed manuals were provided to the Extension Support Unit for quality assurance. The training of the 58 youth has been scheduled to take place from June 22 to July 31 across the four counties.

Additionally, the draft training manuals on how to operate rice milling equipment have also been completed in May. These draft manuals were provided to the Extension Support Unit for quality assurance. The training of the 40 youths has been scheduled to take place from June 29 to July 31.

Sub Task 1.5: Improving Human Nutrition

Development of Diet Behavior-Change Communications (DBCC) Strategy

During May, preparations commenced for the mobilization of Ms. Alison Gardner, a Nutrition Specialist, who was selected for the STTA position of Behavior Change Communication Specialist. Ms. Gardner will commence her assignment at the beginning of June upon deployment.

It is anticipated that Tasks 1.5.1.2 (*Developing a work plan and methodology for a diet behavior change survey to identify barriers to diet diversity*) and Task 1.5.1.3 (*Conducting the diet behavior change survey through focus group discussions*) will be implemented in June. Subsequently, the development of a diet behavior change communication strategy, Activity 1.5.2 (*DBCC strategy implemented and monitored*) will be developed based on the findings of the survey.



Figure 19: USAID FED's Goat Officer explaining the nutrition poster during the livestock chairmen training in Gbarnga, Bong County.

Nutrition messaging outreach to more households

During May, USAID FED printed 2,000 copies of the MoHSW and MoA approved nutrition poster. A total of 1,684 copies of the poster were distributed to LNGOs, CBOs, VSLA groups and lead farmers in Bong, Nimba, Lofa, Grand Bassa, Montserrado and Margibi Counties. USAID FED will also be printing 6,000 copies of flyers containing the same message as the poster. It is anticipated that the flyers will be ready for distribution in June.

In May, a total of 16,717 beneficiaries (2,529 men and 14,188 women) received nutrition messaging through dissemination of posters and training events. These included 125 livestock chairmen trained on goat salt lick fabrication and 9,842 VSLA women receiving technical assistance from EDUCARE VSLA community field facilitators across the six counties. In addition, 6,750 beneficiaries received nutrition messaging through USAID FED extension officers and contracted LNGOs in Nimba County. A total of 16,955 beneficiaries (2,717 men and 14,238 women) have received nutrition messages year to date.

Component Two: Stimulate Private Sector Growth and Investment

Task 2: Policy Enabling Environment for Private Sector Growth

Policy Reform Activities via Technical Working Groups

During the reporting period, USAID FED met with officials at the Ministry of Agriculture (MoA), Ministry of Commerce and Industry (MoCI) and Ministry of Finance and Development Planning (MoFPD) to determine the current status of policy reforms and discuss ways to advance reforms to the next stage in order to improve the business-enabling environment. Policy reforms discussed included implementation of ECOWAS Seed, Pesticide and Fertilizer regulations, progress on renewing EO#64, and tax incentives for small scale farmers with the MoFPD.

MSME Annual Conference

The MoCI organized a third planning meeting for the third annual Micro, Small and Medium Enterprise (MSME) Conference to take place in November 2015. USAID FED participated in the 2014 MSME conference. The planning process brings together the MoCI, Ministry of Youth and Sports (MoYS), donors and private sector stakeholders in collaboration to achieve a successful event. The theme chosen by MoCI is: "Youth Innovation for Economic Empowerment." To facilitate the communication and adoption of policies promoted by the project, USAID FED will serve as Co-chair on the Policy and Agenda Committee. To date, the committee prepared a draft concept note for the MoCI indicating that the conference is aimed at boosting entrepreneurship among Liberians, particularly the youth, and to highlight the need for support of innovation geared toward growth and development of the MSME sector in Liberia.

Seed, Pesticide, and Fertilizer Technical Working Group

The Seed, Pesticide, and Fertilizer Technical Working Group met three times to discuss measures to be undertaken to implement the three ECOWAS regulations published and made into law last year. It was decided that a small working group would be formed to ensure implementation of the ECOWAS Seed Regulation Road Map (Agreed Actions for Liberia prepared by the ECOWAS Secretariat). This small working group will also be responsible for implementing ECOWAS pesticide and fertilizer regulations. The Chairman of the working group is the MoA Assistant Minister for Planning, USAID FED serves as Co-chair, and the World Bank serves as Secretary. The MoA decided it needed to catalogue available human resources and infrastructure within the seed sector such as seed scientists, inspectors, technicians and laboratories within different institutions such as CARI, MoA, AfricaRice, University of Liberia, and USAID FED. Information was provided to the MoA on seed inspectors trained by USAID FED. The West Africa Seed Program (WASP), the West and Central African Council for Agricultural Research and Development (CORAF/WE CARD), Mano River Union Secretariat, and the World Bank have expressed their commitment to working with Liberia to implement all three regulations.

An international seed development STTA hired by USAID FED will start in June 2015 to draft the implementation guidelines and complementary regulations to implement 100% of the ECOWAS Seed Regulation promulgated in the Liberian gazette in August 2014, and to identify what is needed to upgrade and/or establish existing laboratories necessary to certify seeds.

At a meeting chaired by the Assistant Minister for Planning, it was announced that the MoA has been working with the MoCI to streamline the administrative procedures in EO #64 (import duty waiver on agriculture inputs and equipment) which expired in April 2015.

Additionally, USAID FED met with the Commissioner for Domestic Tax, Revenue and Tax Policy Division at the Ministry of Finance and Development Planning. It was learned that the main functions of the Revenue & Tax Policy Division are development and implementation of tax policy proposals, drafting legislation, regulations, procedures and guidance, and participation in negotiation of mining, petroleum and other concession agreements;

The following information on tax Clearance Certificate and procedures of registering a business was gathered during the meeting:

At the time of registration a Standard Integrated Tax Administration System (SGTAS) Number is assigned to the new company. Then the company needs a Tax Clearance Certificate to assure it is fully compliant with tax obligations which is issued within 4 days of request. The certificate is only issued in Monrovia by the Liberia Revenue Authority. The certificate is required if the registered company wants to bid on a government procurement including the 25% set aside for small business procurement,

USAID FED informed the Commissioner of the various incentives for agriculture investment that other West African countries are implementing. There was a lengthy discussion on suspending tax clearance certificate for 3 years for MSME agribusinesses, permanent custom duty exemption for agricultural machinery and inputs and reduced tax rates for MSMEs. The Commissioner, Mr. Talery would like a policy forum to discuss tax clearance forms, tax awareness policy issues among newly registered agriculture-based companies and tax incentives for small scale farmers who want to register as a business. USAID FED is currently reviewing and determining which policies will have significant impact on the vast majority of its beneficiaries, which are smallholder farmers. Most of the policies apply largely to SMEs, which are very limited in number.

Assessment of Training Needs and Training for Relevant Government Agencies and Private Sector

Discussions are under way with the MoCI to prepare a draft scope of work to recruit an international consultant with expertise in assessing and building capacity to improve organizational development and strategic planning in the MoCI including the Department of Small Business Administration (DSBA,) which will be officially launched on July 1.

National Standards Laboratory (NSL)

In April, the NSL reviewed and approved the draft scope of work for a consultant to conduct a gap assessment, market study and business plan for a self-sustaining and functioning institution. The SOW was finalized and recruitment of this consultant commenced in May.

Legal Advisory Services

The FY15 work plan calls for the recruitment of local and international legal advisors to advise on the implications of implementing national policies concurrently with ECOWAS regulations (seed, pesticide, fertilizer) and the impact on WTO accession. USAID FED will discuss this in June with the Technical Working Group on Seeds, Fertilizers and Pesticides.

Outreach to Promote Executive Order No.64

Executive Order No.64 expired in April 2015. The MoA and MoCI are currently working on streamlining the administrative procedures in preparation for an extension of the duty waiver.

Once Executive Order No.64 is extended, USAID FED will request monthly reporting from customs to track utilization and develop clear guidelines for customs officials on how to record such waivers.

Press releases and advertisements for Monrovia newspapers and short radio messages will be drafted once EO No.64 is extended.

Subtask 2.1: Access to Financing

Village Savings and Loan Association Expansion

In May, a total of 9,842 USAID FED female farmers actively participated in the VSLA programs in Lofa, Nimba, Bong, Bassa, Margibi and Montserrado Counties. The 373 VSLAs have saved a total amount of USD \$112,172.67 and have loaned a total of USD \$89,385.69 to 1,528 members. All of the 9,842 active VSLA members have received agri-business training and nutrition messages in the six counties. VSLA active members are those who purchase shares every week for four consecutive weeks. The total number of active members has increased from 8,085 to 9,842 because other new groups that were formed in April only completed their four weeks or one month share purchase in May.

VSLA members generally use the money they borrow from the group to hire labor for their farms. In May, a total of 557 people were hired for 67 days using the money borrowed from VSLAs. This means that a total of 24 Full Time Employment (FTEs) have been generated under the VSLA program.

Pilot Micro-credit Union with VSLA's

The National Apex of Village Savings and Loan Association of Liberia (NAPEX) has registered 37 USAID FED-supported VSLA groups to access loans from the Central Bank of Liberia (CBL). USAID FED is working with NAPEX to finalize the loan agreement with the CBL for the 37 VSLA groups.

Extension of Micro Finance to Farmers and Entrepreneurs

During the reporting period, USAID FED's partner MFI, LEAD, increased Zeelie Farmers Association loan from USD \$10,000 to USD \$24,000. The loan is being used by the association for its rice trading business.

USAID FED is interested in piloting lending using ICT. However, LEAD informed USAID FED that the mobile money system can only work for loan repayments to LEAD. Clients receiving loans from LEAD have to sign a loan agreement before proceeding. Therefore, disbursing loans to clients through mobile money is not feasible right now.



Figure 20: Training of Trainer (ToT) workshop being delivered in Foya, Lofa County

Subtask 2.2: Access to Business Development Support (BDS) Services and Enterprise Service Centers

During May 2015, the Master Business Service Provider (MBSP) Right and Rice Foundation, provided guidance and mentoring services to the five Business Service Providers (Top Consulting Inc. in Montserrado/Margibi Counties, Community Youth Network Program in Grand Bassa County, Liberia Entrepreneur Asset Development in Nimba County, Liberia Initiative Development Services in Bong County and Jacob F. Tomei Enterprise Center in Lofa County), while the BSPs were conducting business

development skills training of trainers (TOT) to the village/group agents, farmers and MSMEs in communities/clusters and districts in the above counties.

A total of 427 village/group agents in Montserrado/Margibi, Bong, Nimba, Lofa and Grand Bassa counties received business development skills training.

An additional 272 village/group agents are undergoing business development skills ToT that is being provided by the business service providers (BSP) and will be completed in June.

Table 9: BSP's TOT with Village/Group Agents Workshop Breakdown.

Name of Business Service Provider (BSP)	Responsible County	Village/Groups Agents TOT Workshop Participants Engaged		Total Village/Group Agents Received Business Development Skills TOT Mentorship/Coaching	Balance Village/Group Agents undergoing Business Development Skills TOT
		Male	Female		
LEAD	Nimba	45	43	88	112
LIDS	Bong	79	19	98	27
Community Youth Network Program	Grand Bassa	86	9	95	29
Jacob F. Tomei Enterprise Center	Lofa	24	2	26	100
Top Consulting Inc.	Montserrado/Margibi	88	32	120	4
Total of All		322	105	427	272

Five draft business plan templates from BSPs have been received and sent to the various value chain leads for their comments (Table 10). USAID FED is expecting the remaining five additional draft business plan templates before the end of June.

Table 10: Breakdown of received draft Business Plan Templates.

Name of Business Service Providers	County	Type of draft Business Plan Templates		Total
LEAD	Nimba	Goat Farming		1
Jacob F. Tomei Enterprise Center	Lofa	Low Land Rice	Up Land Rice	2
Top Consulting Inc.	Montserrado/Margibi	Rain Shelter	Refrigerator storage	2
Total Business Plan Template Received				5

The financial projection modelling of the Payee and Dumpa Rice Business Hubs located in Nimba County was prepared by USAID FED's Business Development Services Team and is currently with FED Technical teams for appraisal and inputs. A financial projection model for the remaining six other Rice Business Hubs is currently in progress.

Subtask 2.3: Women Participation in Agribusiness

Gender Baseline Study

According to FY15 work plan, USAID FED will conduct a gender baseline study following the Women Empowerment in Agriculture Index (WEAI) model to establish a set of information on the social and

economic status of women currently working in agriculture, specifically in the four food crop sector value chains that USAID FED supports. The baseline data will be used to assess what impact, if any, program activities have made on the targeted beneficiaries, taking into account the program objectives. This will be done under subtask I.I.

Women Business Incubation

In Q1 FY15, a total of 103 women entrepreneurs graduated from the USAID FED Leadership and Business Incubation for Women Entrepreneurs Training Program. The training program included sessions on leadership, effective communication, effective negotiation, public speaking, strategic planning, basic record keeping and basic business registration. During Q2 FY15, the Women-owned Enterprise Development Specialist (WEDS) arrived in Monrovia to set up a business incubation/mentoring program for 25 Liberian women-owned businesses. 27 candidates were chosen from a pool of over 50 candidates including those who participated in leadership training, and from VSLAs and the value chains. The goal is to facilitate growth, improve efficiency and effectiveness, and increase profitability of these women-owned micro-enterprises.

The Women-owned Enterprise Development Specialist (WEDS) conducted three business plan workshops for participants in the Women-owned Enterprise Business Incubation Program.

<u>Date</u>	<u>Location</u>	<u>Number of Participants</u>
May 5-7	Bong County	9 (including one from Lofa)
May 12-14	Monrovia	6 (from Montserrado/Margibi)
May 19-21	Nimba County	12 (representing 11 businesses)

Total participants	27, representing 26 businesses
--------------------	--------------------------------

All participants completed business plan templates for their organizations or businesses. The plans are being reviewed and entered into electronic format. Baseline data was collected on all participants, and data on control groups is being compiled.

The next steps are to 1) hold meetings in June with each individual to finalize the plans and 2) locate suitable local mentor(s) for the businesses from July 2015-June 2016. A scope of work for the mentor is being prepared.

Component Three: Build Local Technical and Managerial Human Resource Capability

NDA curriculum rollout in the first semester of AY 2014-2015

USAID FED has commenced assessment of the roll out of the National Diploma in Agriculture (NDA) program at the Centers of Excellence (CoE) beginning with Nimba County Community College (NCCC) and Grand Bassa Community College (GBCC). One-on-one discussions are being carried out with instructors and students regarding the delivery of the NDA program, including methodologies put in place for carrying out student's practical lessons with the selected farms and industries. The assessment of the program will help determine the effectiveness of the curriculum, instructor's delivery and practical exercises while outlining areas that could use improvement regarding the NDA.

CoE's Enrollment Data

Table 11: Agricultural Department & NDA student enrollment.

Center Of Excellence	Male	Female	Total
Grand Bassa Community College	149	85	234
Nimba County Community College	82	60	142
Lofa County Community College	167	45	212
Booker Washington Institute NDA	40	7	47
BWI Regular and AVTP	131	46	177
Grand Total	569	243	812

General institution enrollment data reflecting total number of students per institution excluding the Agriculture Department

Table 12: Institution enrollment data reflecting total number of students per institution excluding the Agriculture Department.

Center Of Excellence	Male	Female	Total
Grand Bassa Community College	535	471	1006
Nimba County Community College	303	145	448
Lofa County Community College	400	155	555
Booker Washington Institute	To be updated	To be updated	To be updated
Grand Total	1,238	771	2,009

*The figures shown in these tables reflect the current enrollment status at the CoE's, however, since enrollment is still in progress, the data will be updated at the close of the academic year 2014/2015 to reflect the actual enrollment.

Below is a list of instructors at each CoE teaching the NDA program:

Table 13: LCCC NDA instructors.

#	NDA Instructors	Course Title
1.	Alfred S. Kpadebah	NDA 111 Principles of Animal Production
2.	Mr. Kolubah B. Akoi	NDA 112 Communication in English I
3.	Mr. Kolie Y. Harris	NDA 114 Principles of Crop Production NDA 117 Introduction to Farm Woodland Management
4.	Mr. Joseph Nyuma	NDA 115 Practical Math/Problem solving I
5.	Mr. Moore	NDA 116 Computer Application I
6.	Mr. Paul L. S. Nabieu	NDA 118 Introduction to Soil Science

Table 14: GBCC NDA instructors.

#	NDA Instructors	Course Title
1.	Mr. Jeremiah M. Swinteh	NDA 111 Principles of Animal Production
2.	Mr. Raymond P. Fangawa	NDA 112 Communication in English I
3.	Mr. Benjamin M. Davis	NDA 114 Principles of Crop Production
4.	Mr. Martin Sancho	NDA 115 Practical Math/Problem solving I
5.	Mr. Jestino B. Oweh	NDA 116 Computer Application I
6.	Mr. George G. Williams	NDA 117 Introduction to Farm Woodland Management
7.	Mr. Morris B. Zorbah	NDA 118 Introduction to Soil Science

Table 15: NCCC NDA instructors.

#	NDA Instructors	Course Title
1.	Justin G. Luo	Currently teaching in the Associate degree program
2.	Terry N. Dologbay	Currently teaching in the Associate degree program
3.	Nathan S. Gono	Currently teaching in the Associate degree program
4.	Solomon Queetee	Currently teaching in the Associate degree program
5.	Samuel N. Wuo	Currently teaching in the Associate degree program
6.	Nya P. Yeleon	Currently teaching in the Associate degree program
7.	Paul Lamin Sakpa Nabieu	Currently teaching in the Associate degree program

Table 15 shows that the NDA program has not been rolled out at NCCC. The administration stated that their academic school year was already in progress when the NDA program was launched. The NCCC administration plans to work with USAID FED in conducting promotional activities to encourage students to enroll with the NDA program which will officially commence during the second semester at NCCC.

Table 16: BWI NDA instructors.

#	NDA Instructors	Course Title
1.	Jacob Swee	NDA 111 Principles of Animal Production
2.	J. Diameno Chea	NDA 112 Communication in English I
3.	Sylvester Y. Gbarshar	NDA 114 Principles of Crop Production
4.	Carlton Jaurey	NDA 115 Practical Math/Problem solving I
5.	Nelson B. McGill	NDA 116 Computer Application I
6.	J. William Barrolle	NDA 117 Introduction to Farm Woodland Management
7.	Justin J. Kolie	NDA 118 Introduction to Soil Science

Incorporation of practical exercises in the lesson plans

During May 2015, stakeholder's workshops were held at both the Paynesbury Campus of GBCC, and at Booker Washington (BWI). The workshops were intended to finalize MoUs between farm owners and these institutions for the purpose of allowing the NDA students to use the farms for the practical exercises of the program.

Below is a list of the farms that signed MoUs with GBCC and BWI to allow the NDA students to use their farms for practical exercises.

GBCC:

1. Grangee Town Goat Cluster
2. Joyce Kolvah Vegetable & Cassava Farm
3. Fortsville Vegetable Farming Group.

BWI:

1. E. Musu Tuah-Younn Multipurpose Farm
2. Gborfilla Farming Group
3. United Farmers' Cluster
4. J. Kpardeh Akoi Farming Group
5. Allen yancy Onion Farm



Figure 21: Madame Joyce Korvah, owner, Joyce Kolvah Vegetable & Cassava Farm and Dr. Levi Zangai, GBCC President signing a MoU for the practical exercise program of the NDA.

Development of internship programs with industry players and finalization of MoUs

During May, USAID FED held discussions with the Nimba County Community College (NCCC) Administration regarding the establishment of internship opportunities with key industrial players for NDA students at their institution. It was agreed that the consultative meeting with key stakeholders will be held on June 5.

Instructors training on effective delivery of the NDA

USAID FED carried out a follow-up skills gap assessment of CoE instructors. The assessment will determine the training needs of the instructors for effective delivery of the NDA curriculum.

Develop and implement a 3-year strategic plan including priority enterprises to be established at the CoE's

One major objective of the exposure visit to Ghana in February was to identify additional farm enterprises for establishment at each CoE for the future enhancement of the NDA students' practical skills. The farm enterprises will also be used to promote income generation for its sustainability



Figure 22: Cowpeas being planted at a NCCC demonstration farm



Figure 23: Power tiller training at NCCC campus.

and continuity going forward, even without USAID FED's intervention. This task when implemented will help to better equip the NDA graduates in becoming entrepreneurs and/or preparing them for employment immediately upon graduation.

USAID FED is still following up with the Centers of Excellence for submission of their action plans for implementation of the establishment of additional enterprises. A reminder has been sent to the institutions accordingly. The final deadline for the submission of the plans is now set for June 15.

Support the establishment of two to three feasible enterprises with business and marketing plans

Nimba County Community College

Freshman students pursuing the NDA at NCCC have commenced their practical exercises showcasing what has been learned in the classroom. The NDA Students are planting local varieties of groundnut and cowpea on 0.1 ha of land.

Grand Bassa Community College

During the reporting period, land preparation and laying of beds for pepper and bitter ball seedlings to be transplanted from the nursery have commenced at GBCC.

In May, GBCC received 100 bags of compost procured at USD \$15 per bag, by USAID FED from BWI for application on the vegetable enterprise site at GBCC's main campus.



Figure 24: The NDA students at GBCC in Big Joe Town conducting their practical exercises at the farm

Lofa County Community College

In May, the NDA animal production classes launched their first practical session on the LCCC swamp land. The practical team was headed by Mr. Alfred S. Kpadebah Instructor for Principles of Animal Production (NDA 111) and the Dean of the Agriculture Department, Mr. Paul L. S. Nabieu. Practical sessions were also conducted in other classes including Introduction to Soil Science (NDA 118), Computer Application (NDA 114), and Introduction to Farm Woodland Management (NDA 117).

Power Tiller Training begin at the Centers of Excellence

USAID FED Component Three organized a Training of Trainers (ToT) for agro technicians and instructors at three CoEs on power tiller operations and maintenance. The five-day training has been carried out at NCCC, LCCC and BWI. The GBCC training will be done in June upon receipt of a power tiller from USAID FED.

After completing the capacity-building training workshop, participants are expected to be able to operate the power tiller in plowing their land for planting of rice, vegetable, and cassava. The CoE can also provide services to surrounding community farmers for a fee in order to generate income for the maintenance and replacement of the equipment.

Component Four: Cross-Cutting Activities

Task 4.1: Communications/Knowledge Management

USAID FED Media Stories

USAID FED was in four media reports during May 2015:

- Liberia Business Incubator Cassava Processing Facility Inaugurated, Daily Observer.
- USAID FED launches Liberia Business Incubator, Inquirer
- US commits to Liberia transformation, Women Voices
- USAID FED GOL to Inaugurate Cassava Processing Facility, Liberia News Agency.
- USAID FED COP Agnes Luz on UNMIL Radio, Coffee Break Show to discuss Liberia Business Incubator.

Task 4.2: Environmental Compliance

Objectives of trip and routine site monitoring

1. To ensure that USAID FED's activities are conducted in accordance with USAID FED's Environmental Monitoring and Mitigation Plan (EMMP)
2. To monitor on-going construction of water wells in the counties
3. To update all environmental files in Grand Bassa County

In addition to promoting sound environmental management as a key aspect of improved, sustainable agricultural production, USAID FED must also enhance monitoring to ensure that farming activities are in compliance with GoL and USAID regulation.

As such, all USAID FED interventions must operate within the project environmental compliance framework, most importantly the Initial Environmental Examination (IEE) and the EMMP.

The routine monthly monitoring of sites across the four value chains is part of measures put in place to ensure that best practices are observed by farmers when conducting their activities. This routine inspection enhances compliance and verifies the knowledge of farmers on pollution control, soil and water use, application of fertilizers, and implementation of best practices. All environmental files were not fully updated in the county because the environmental monitoring forms are not being used to conduct spot checks by extension officers.

The Environmental Monitoring Assistant and Grand Bassa County Manager conducted site visit to several lowland rice, vegetable, goat shelters, and water well sites. The main purpose of the visit was to ensure that USAID FED's activities are compliant to its EMMP. Another objective of this trip was to update all environmental files and monitor the ongoing construction of water wells in Grand Bassa County.

Payecea Town lowland rice site

The Payecea lowland rice farming group has begun land preparation activities. The main drainage construction is ongoing. According to the lead farmer, Elijah Paegar, water is available throughout the year,



Figure 25: Payecea town lowland rice ditch being constructed.

which will help supply water to rice plots in the field. The land has been previously cultivated hence it complies with the environmental requirement of not being a virgin lowland, and workers have Personal Protective Equipment (PPE) available to ensure personal safety while conducting farming activities. USAID FED's Environmental Mitigation Plan is being observed by farmers at site.

Gio Town lowland rice site

As part of FY15 new farming group, Gio Town lowland rice site has also begun land preparation activities, beginning with the construction of the main drainage to mitigate the risk of unwanted standing water. Water is available throughout the year, which makes it possible to conduct double cropping during the year. Farmers also have adequate PPE available to carry out their land preparation activities. The land also has been previously cultivated and not a virgin lowland hence it complies with USAID FED's environmental requirements for compliance.

David Town Farmer Group lowland rice

This is a new farming group that was also selected for FY15. As part of USAID FED's environmental monitoring for new sites, site selection was in line with USAID FED's EMMP. The land also has been previously farmed. The main drainage is being dug to avoid stagnant water, which could give rise to flooding and water borne diseases. Farmers also have adequate PPE to carry out their work. There is a need for Extension Officers to make appropriate use of the environmental monitoring forms and help farmers understand the importance of environmental health and safety issues.

Newcess vegetable site

The farm site effectively and safely uses water resources for irrigation purposes. The farm site is appropriately drained to avoid unwanted standing water. The site has been cleared of weeds and vegetation, which shows that the farmers are maintaining a clean surrounding to minimize pest incidence and avoid chemical spraying. This is one of the best practices in environmental conservation.

Neorpeh goat site

This site needs clearing because it is forested which could serve as a breeding place for snakes that could cause injury and death for livestock. The ramp leading into the shelter is damaged. Water well construction is still ongoing. Water will have to be tested before being used by residents and livestock. Shelter fence needs to be reinforced and a new gate constructed to keep livestock confined. The issues were discussed with the County Manager and it was agreed that these will be addressed in the month of June.

Blaygbah goat site

The goat shelter is still in good condition, and water well construction is ongoing but the water table is still low. Contractors need to drill deeper to enable access to water all year. Covets for the water well are still being constructed. Livestock are kept in a safe distance from houses and other structures. The manures and other wastes are regularly cleaned, and there is sufficient fodder to feed livestock. Regular veterinary attention is given to livestock to keep them healthy.

Task 4.3: Monitoring & Evaluation

Rapid Rural Appraisal

The Rural Rapid Appraisal final report is being revised based on comments from the USAID FED Management. This will be submitted to USAID and MoA for their final approval in June.

M&E Staff replacement

The M&E team in collaboration with HR hired a new M&E Coordinator, Mr. Afamah Kwennah for Nimba County during the reporting period.

GIS Mapping

During the reporting period, the rice business hubs of FY14 were mapped and updated as well as FY15 business hubs. The cassava nursery sites in Lofa and Grand Bassa were also mapped.